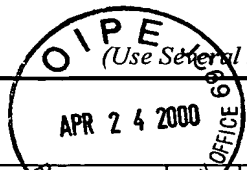


Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>	Atty Docket No.: IMM1P066.RE	Application No.: 09/307,023
	Applicant: Salcudean, et al.	
	Filing Date: 5/7/99	Group: 2778 Group 2700



RECEIVED
 APR 25 2000

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
KC	A	3,863,098	1/28/75	Mehr	315	367	2/23/73
KC	B	4,148,014	4/3/79	Burson	340	709	4/6/77
KC	C	4,398,889	8/16/83	Lam, et al.	434	45	6/8/81
KC	D	4,477,043	10/16/84	Repperger	244	223	12/15/82
KC	E	4,603,284	7/29/86	Perzley	318	568	6/5/84
KC	F	4,604,016	8/5/86	Joyce	414	7	8/3/83
KC	G	4,632,341	12/30/86	Repperger, et al.	244	230	2/6/85
KC	H	4,712,101	12/8/87	Culver	340	710	12/4/84
KC	I	4,734,685	3/29/88	Watanabe	340	710	7/18/84
KC	J	4,782,327	11/1/88	Kley, et al.	340	365 P	1/2/85
KC	K	4,795,296	1/3/89	Jau	414	5	11/17/86

Foreign Patent or Published Foreign Patent Application

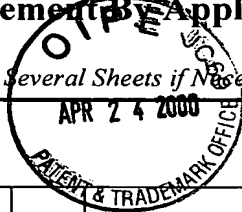
Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	No
KC	L	0 085 518 A1	8/10/83	European	--	--	X	
KC	M	0 265 011 A1	4/27/88	European	--	--	X	
KC	N	0 607 580 A1	7/27/94	European	--	--	X	
KC	O	WO 92/00559	1/9/92	PCT	--	--	X	
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Fischer, et al., "Specification and Design of Input Devices for Teleoperation," CH2876-1/90/0000, pp. 540-545, IEEE.
KC	S	Kotoku, Tetsuo, "A Predictive Display with Force Feedback and its Application to Remote Manipulation System with Transmission Time Delay," Proc. of the IEEE/RSJ Int'l Conf. On Intelligent Robots and Systems, July 1992, pp. 239-246.
KC	T	Jacobsen, et al., "High Performance, High Dexterity, Force Reflective Teleoperator II," ANS Topical Mtg. On Robotics and Remote Systems, Feb. 1991, pp. 1-15.
Examiner: <i>Kent C. [Signature]</i>		Date Considered: 8/11/00

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>	Atty Docket No.: IMM1P066.RE	Application No.: 09/307,023
	Applicant: Salcudean, et al.	
	Filing Date: 5/7/99	Group: 0778



RECEIVED
APR 25 2000
Group 2700

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
KC	A	4,800,721	1/31/89	Cemenska, et al.	60	393	2/13/87
KC	B	4,823,634	4/25/89	Culver	74	471 XY	11/3/87
KC	C	4,861,269	8/29/89	Meenen, Jr.	434	45	3/30/88
KC	D	4,879,556	11/7/89	Duimel	341	20	10/26/87
KC	E	4,925,312	5/15/90	Onaga, et al.	364	513	3/21/88
KC	F	4,935,728	6/19/90	Kley	340	709	11/20/87
KC	G	4,961,038	10/2/90	MacMinn	318	696	10/16/89
KC	H	4,983,901	1/8/91	Lehmer	318	685	4/21/89
KC	I	5,007,300	4/16/91	Siva	74	471 XY	1/22/90
KC	J	5,095,303	3/10/92	Clark, et al.	340	710	3/27/90
KC	K	5,107,080	4/21/92	Rosen	200	6 A	12/1/89

Foreign Patent or Published Foreign Patent Application

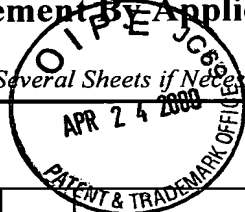
Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Kotoku, et al., "Environment Modeling for the Interactive Display (EMID) Used in Telerobotic Systems," IEEE/RSJ Int'l Workshop on Intelligent Robots and Systems, Nov. 1991, pp. 999-1004.
KC	S	Howe, et al., "Task Performance with a Dextrous Teleoperated Hand System," Proc. of SPIE, Vol. 1883, Boston, Nov. 1992, pp. 1-9.
KC	T	Adelstein, et al., "A High Performance Two Degree-of-Freedom Kinesthetic Interface," MIT, 1992, pp. 108-112.
Examiner: <i>Kent Clary</i>		Date Considered: <i>8/11/00</i>

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement by Applicant <i>(Use Several Sheets if Necessary)</i>	Atty Docket No.: IMM1P066.RE	Application No.: 09/307,033
	Applicant: Salcudean, et al.	
	Filing Date: 5/7/99	Group: Group 2700



RECEIVED
APR 25 2000
2718

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
KC	A	5,116,180	5/26/92	Fung, et al.	414	5	5/3/90
KC	B	5,142,931	9/1/92	Menahem	74	471 XY	2/14/91
KC	C	5,184,319	2/2/93	Kramer	364	806	2/2/90
KC	D	5,186,629	2/16/93	Rohen	434	114	8/22/91
KC	E	5,193,963	3/16/93	McAfee, et al.	414	5	10/31/90
KC	F	5,203,563	4/20/93	Loper III	273	148 B	3/21/91
KC	G	5,228,356	7/20/93	Chuang	74	471 XY	11/25/91
KC	H	5,264,768	11/23/93	Gregory, et al.	318	561	10/6/92
KC	I	5,275,565	1/4/94	Moncrief	434	29	2/23/93
KC	J	5,296,846	3/22/94	Ledley	345	161	10/5/92
KC	K	5,298,890	3/29/94	Kanamaru, et al.	345	157	4/10/91

Foreign Patent or Published Foreign Patent Application

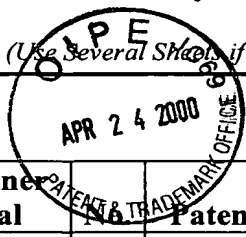
Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Ouh-young, et al., "Using A Manipulator For Force Display In Molecular Docking," CH2555-1/88/0000, IEEE, pp. 1824-1829.
KC	S	Winey III, Calvin McCoy, "Computer Simulated Visual and Tactile Feedback As An Aid to Manipulator and Vehicle Control," Dept. of Mech. Eng., MIT, May 1981, pp. 1-79.
KC	T	Adelstein, et al., "Design and Implementation of a Force Reflecting Manipulandum for Manual Control Research," NASA-Ames Research Center, Dept. of Mech. Eng., MIT, 1992, pp. 1-26.
Examiner: Kent C. Long		Date Considered: 8/11/00

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>	Atty Docket No.: IMM1P066.RE	Application No.: 09/307,023
	Applicant: Salcudean, et al.	
	Filing Date: 5/7/99	Group: 2778



U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
KC	A	5,389,865	2/14/95	Jacobus, et al.	318	568.11	12/2/92
KC	B	5,459,382	10/17/95	Jacobus, et al.	318	568.11	6/9/94
KC	C	5,471,571	11/28/95	Smith, et al.	395	137	7/17/92
KC	D	5,576,727	11/19/96	Rosenberg, et al.	345	179	6/5/95
KC	E	5,589,828	12/31/96	Armstrong	341	20	3/5/92
KC	F	5,629,594	5/13/97	Jacobus, et al.	318	568.11	10/16/95
KC	G	5,691,898	11/25/97	Rosenberg, et al.	364	190	3/28/96
KC	H	5,701,140	12/23/97	Rosenberg, et al.	345	156	7/12/94
KC	I	5,721,566	2/24/98	Rosenberg, et al.	345	161	6/9/95
KC	J	5,734,373	3/31/98	Rosenberg, et al.	345	161	12/1/95
KC	K	5,739,811	4/14/98	Rosenberg, et al.	345	161	9/27/95

Foreign Patent or Published Foreign Patent Application

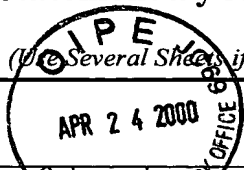
Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Russo, Massimo Andrea, "The Design and Implementation of a Three Degree-of-Freedom Force Output Joystick," Dept. of Mech. Eng., May 1990, pp. 1-33.
KC	S	Bejczy, et al., "The Phantom Robot: Predictive Displays for Teleoperation with Time Delay," Jet Propulsion Lab., CH2876-1/90/0000, IEEE, pp. 546-550.
KC	T	Ouh-young, Ming, "Force Display in Molecular Docking," Dept. of Computer Science, Univ. of North Carolina, 1990, pp. i-viii, 1-12, 66-85.
Examiner: <i>Kurt C. [Signature]</i>		Date Considered: 8/11/00

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets, if Necessary)</i>	Atty Docket No.: IMM1P066.RE	Application No.: 09/307,023
	Applicant: Salcudean, et al.	
	Filing Date: 5/7/99	Group: 2778



RECEIVED

Group 2700

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- Class	Filing Date
KC	A	5,757,358	5/26/98	Osga	345	146	6/5/95
KC	B	5,767,839	6/16/98	Rosenberg	345	161	3/3/95
KC	C	5,805,140	9/8/98	Rosenberg, et al.	345	161	11/17/95
KC	D	5,831,408	11/3/98	Jacobus, et al.	318	568.11	5/12/97
KC	E	5,844,392	12/1/98	Peurach, et al.	318	568.17	5/21/97
KC	F	5,880,714	3/9/99	Rosenberg, et al.	345	156	1/15/97
KC	G	6,037,927	3/14/00	Rosenberg	345	156	4/7/97
KC	H	6,046,727	4/4/00	Rosenberg, et al.	345	156	2/9/99
KC	I						
KC	J						
	K						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub- class	Translation Yes No
	L						
	M						
	N						
	O						
	P						

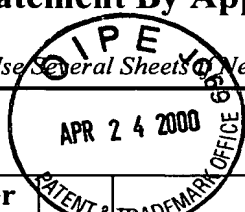
Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Hannaford, et al., "Performance Evaluation of a Six-Axis Generalized Force-Reflecting Teleoperator," IEEE Trans. On Systems, Man and Cybernetics, Vol. 21, No. 3, May/June 1991, pp. 620-623, 631-633.
KC	S	Batter, et al., "GROPE-1: A Computer Display to the Sense of Feel," Proc. IFIP Congress 1971, pp. 759-763.
KC	T	Kilpatrick, Paul Jerome, "The Use of a Kinesthetic Supplement in an Interactive Graphics System," Dept. of Computer Science, Univ. of North Carolina, 1976, pp. 1-175.

Examiner: <i>Kent Chang</i>	Date Considered: 8/11/00
---------------------------------------	------------------------------------

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>	Atty Docket No.: IMM1P066.RE	Application No.: 09/307,023
	Applicant: Salcudean, et al.	
	Filing Date: 5/7/99	Group: 2778 Group 2700



RECEIVED
 APR 25 2000
 Group 2700

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- Class	Filing Date
	A						
	B						
	C						
	D						
	E						
	F						
	G						
	H						
	I						
	J						
	K						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub- class	Translation Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
VC	R	Ouh-young, et al., "Creating an Illusion of Feel: Control Issues in Force Display," Dept. of Computer Science, Univ. of North Carolina, Sept. 1989, pp. 1-14.
	S	
	T	
Examiner: Kent Chang		Date Considered: 8/11/00

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



RECEIVED
APR 25 2000
TC 2700
R0006
2778

Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No. IMM1P066.RE Applicant: Salcudean et al. Filing Date: 5/7/99	Application No. 09/307,023 Group 2778

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
KC	A	4,560,983	12/24/85	Williams	340	825	9/17/82
KC	B	4,706,294	11/10/87	Ouchida	381	109	6/10/86
KC	C	4,896,554	1/30/90	Culver	74	471XY	4/24/89
KC	D	4,949,119	8/14/90	Moncrief et al.	364	578	1/12/89
KC	E	5,044,956	9/3/91	Behensky et al.	434	45	1/12/89
KC	F	5,076,517	12/31/91	Ferranti et al.	244	228	8/14/89
KC	G	5,103,404	4/7/92	McIntosh	318	568.22	12/20/89
KC	H	5,146,566	9/8/92	Hollis, Jr. et al.	395	275	5/29/91
KC	I	5,185,561	2/9/93	Good et al.	318	432	7/23/91
KC	J	5,197,003	3/23/93	Moncrief et al.	364	410	4/7/92
KC	K	5,220,260	6/15/93	Schuler	318	561	10/24/91

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Iwata, H., "Artificial Reality with Force-Feedback: Development of Desktop Virtual Space with Compact Master Manipulator," 1990, Computer Graphics, Vol. 24, pgs 165-170.
KC	S	Wiker, S. et al., "Development of Tactile Mice for Blind Access to Computers: Importance of Stimulation Locus, Object Size, and Vibrotactile Display Resolution," Proc. of Human Factors Soc., 1991, pp. 708-712.
KC	T	Atkinson et al., "Computing with Feeling, Computing & Graphics," Vol. 2, 1977, pg 97-103.
Examiner <i>Kent Chang</i>		Date Considered <i>8/11/00</i>

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No. IMM1P066.RE Applicant: Rosenberg et al. Filing Date: 5/7/99	Application No.: 09/307,003 Group 2778	RECEIVED APR 25 2000 TC 2203 MAIL ROOM

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
KC	A	5,223,776	6/29/93	Radke et al.	318	568.1	12/31/90
KC	B	5,235,868	8/17/93	Culver	74	471xy	10/2/91
KC	C	5,286,203	2/15/94	Fuller et al.	434	45	10/7/92
KC	D	5,296,871	3/22/94	Paley	345	163	7/27/92
KC	E	5,354,162	10/11/94	Burdea et al.	414	5	8/31/92
KC	F	5,381,080	1/10/95	Schnell et al.	318	566	2/18/93
KC	G	5,414,337	5/9/95	Schuler	318	561	6/11/93
KC	H	5,559,412	9/24/96	Schuler	318	561	5/3/95
KC	I	5,634,794	6/3/97	Hildreth et al.	434	37	3/23/95
KC	J	5,781,172	7/14/98	Engel et al.	345	164	6/16/97
KC	K	5,889,670	3/30/99	Schuler et al.	364	186	1/11/96

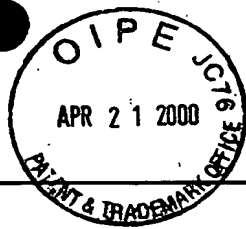
Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-Class	Translation	
							Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
KC	R	Millman et al., "Design of a Four Degree-of-Freedom Force-Reflecting Manipulandum with a Specified Force/Torque Workspace," 1991, IEEE CH2969-4, pgs. 1488-1492.
KC	S	Brooks Jr., et al., "Project GROPE-Haptic Displays for Scientific Visualization," 1990, Computer Graphics, Vol. 24, pgs. 177-185.
KC	T	Minsky et al., "Feeling & Seeing: Issues in Force Display," 1990, ACM 089791-351-5, pgs. 235-270.
Examiner <i>Kent Chang</i>		Date Considered <i>8/11/00</i>

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form 1449 (Modified) Information Disclosure Statement By Applicant (Use Several Sheets if Necessary)	Atty Docket No. IMM1P066.RE Applicant: Rosenberg et al. Filing Date: 5/7/99	Application No.: 09/307,023 Group 2778

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
EC	A	5,889,672	3/30/99	Schuler et al.	364	188	6/3/98
	B						
	C						
	D						
	E						
	F						
	G						
	H						
	I						
	J						
	K						

RECEIVED
 APR 25 2000
 TC 2700 MAIL ROOM

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-Class	Translation	
							Yes	No
	L							
	M							
	N							
	O							
	P							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
	R	
	S	
	T	
Examiner	Date Considered	
Kent CR	8/11/00	

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.